

AMENDMENTS TO THE SPECIFICATION

Please amend the specification as shown below.

Please amend the paragraph bridging pages 15 and 16 as shown below:

Requirement (D)

In order to achieve the first object, a three-dimensional surface roughness $S\Delta a$ of a heat-shrinkable polyester film gives a value of preferably not less than 0.008 and not more than 0.04. (Requirement (D)). Control of $S\Delta a$ within the range enables securing excellent film-formation property and processability. The three-dimensional surface roughness $S\Delta a$ may be measured with a three-dimensional roughness gauge (for example, product of Kosaka Seisakusho Laboratory "ET-30K"). The three-dimensional surface roughness $S\Delta a$ means a three-dimensional average inclination, and is measured in such a manner that at each of 150 points set in arbitrary directions of a film at intervals of $2\mu\text{m}$ by a plane view, an average inclination Δa defined by a following equation is measured in a direction orthogonal the directions, obtaining an average of measured results in these all points. For example, the above-mentioned 150 points are set in TD direction (an orthogonal direction to a running direction in film production) of a film, and an average inclination Δa is measured in MD direction (a running direction in film production) of the film.

$$\Delta a = \frac{1}{L} \int_0^L \left| \frac{d}{dx} f(x) \right| dx$$

[where, $f(x)$ represents a profile curve, and in detail, it represents a size of unevenness at coordinate x set in a measurement direction (the value is positive in case of being higher than a mean line, and negative in case of lower than the mean line), and L represents a measurement length.]

Please amend the first full paragraph on page 17 as shown below:

Requirement (E)

In addition, in order to achieve the first object, a three-dimensional surface roughness SR_z of the heat-shrinkable polyester film of the present invention is preferably not less than $0.6\mu\text{m}$, and not more than $1.5\mu\text{m}$.

Control of the SRz within the range can improve blocking resistance after container wrapping. The three-dimensional surface roughness SRz may be measured in a same manner as in the SΔa with a three-dimensional roughness gauge (for example, product of Kosaka Seisakusho Laboratory "ET-30K").

Please amend the paragraph beginning in line 8 and ending in line 20 on page 24 as shown below:

As the lower molecular weight ultraviolet radiation cutting agent, for example, include compounds represented with following formula (1), such as, "~~Bonisorb 3901~~," a ultraviolet radiation cutting agent~~[[,]]~~ commercially available under the trademark BONASORB UA-3901, manufactured by Orient chemical Industries, Ltd. etc.; compounds represented with the following formula (2), a benzotriazol ultraviolet radiation cutting agent "~~Tinuvin (registered trademark)-326~~" commercially available under the trademark TINUVIN 326 manufactured by {Ciba Specialty Chemicals etc.; compounds represented with the following formula (3), such as "~~LA-31~~" a compound commercially available under the trademark ADK STAB LA-31 manufactured by Asahi Denka Co., Ltd. etc.; benzophenone ultraviolet radiation cutting agents; cyanoacrylate ultraviolet radiation cutting agents; and phenyl salicylate ultraviolet radiation cutting agents etc.

Please amend the paragraph beginning in line 14 and ending in line 23 on page 26 as shown below:

As the ultraviolet radiation cutting polymers, commonly used various ultraviolet radiation cutting polymers may be used. Preferable ultraviolet radiation cutting polymers include polymers obtained from monomers having ultraviolet absorption property (naphthal imide compounds etc.) For example, there may be used copolyesters including naphthalene dicarboxylic acids and naphthal imido compound represented with the following formula (4) "~~Novapex (registered trademark)-U110~~" commercially available under the trademark NOVAPEX U110, manufactured by Mitsubishi Chemical, Inc. etc. as acid components.

Please amend the first full paragraph on page 68 as shown below:

A surface of a sample film is probed with a needle along MD of the film. (measurement

length: 1 mm, cutoff value: 0.25 mm). A needle type three-dimensional roughness gauge (product of Kosaka Seisakusho Laboratory "ET-30K") is used for probing. (Radius of needle: 2 μ m, load: 30 mg). A projections and depressions profile with a length of 1 mm obtained by this probing is divided into 500 points in a pitch of 2 μ m, and heights of each point are inputted to a three-dimensional roughness analysis device (product of Kosaka Seisakusho Laboratory "AT-30K"). A same operation as described above is continuously performed in TD of the film 150 times at intervals of 2 μ m (that is, over 0.3mm in TD of the film). Calculation with the analysis device gives S Δ a and SRz.

Please amend the first full paragraph on page 74 as shown below:

In a same manner as in Synthesis example 1, polyesters B to G represented in Table 1 were synthesized. In Synthesis examples 2 and 3, polyesters B and C were obtained using antimony trioxide so that Sb atom might give 160 ppm with respect to the polyester as a polymerization catalyst. In addition, in Synthesis example 4, polyester D was obtained using titanium tetrabutoxide so that Ti atoms give 90 ppm with respect to polyester as a polymerization catalyst. Furthermore, in Synthesis example 6, polyester F was obtained using cobalt acetate tetra hydrate so that ~~Mg~~ Co atom gives 20 ppm with respect to polyester as a polymerization catalyst, and furthermore using titanium tetrabutoxide so that Ti atoms may give 15 ppm with respect to polyester as a polymerization catalyst. In Synthesis example 7, polyester G was obtained using a same polymerization catalyst as in Synthesis example 1.

Please amend the second paragraph on page 74 as shown below:

As a lubricant, silica having a mean particle diameter of 1.8 μ m (manufactured by Fuji Silysia Chemical LTD. "Sisilia Sylisia 350"), silica having a mean particle diameter of 0.007 μ m, or silica having a mean particle diameter of 5.80 μ m were added by 0.7 mass % in polyester A or polyester E, respectively to obtain a master batch, and the master batch was to be added to films.

Please amend the paragraph bridging pages 84 and 85 as shown below:

Experiment 12

Produced was a laminated polyester film No.12 having three layers comprising both outer layers and a central layer. In the central layer of this laminated polyester film, each separately

pre dried chip of the polyester A, the polyester B, and the polyester D, respectively, were used to be blended at percentages represented in Table 6. Into the mixed polyester, an ultraviolet radiation cutting agent (manufactured by Ciba Specialty Chemicals) ~~Tinuvin (registered trademark)-326)~~ commercially available under the trademark TINUVIN 326 was added so that the ultraviolet radiation cutting agent might give 1 mass % in a total of 100 mass % of the mixed polyester and the ultraviolet radiation cutting agent. In addition, a mixture of the mixed polyester and the ultraviolet radiation cutting agent having a same composition as in the central layer was used also for both outer layers. The mixed polyester chip were co-extruded at 280°C using a monoaxial extruder having a T die, and then cooled with casting rolls immediately. Obtained was an undrawn film with a three-layered structure having thicknesses of both outer layers of 65 µm, respectively, and a thickness of the central layer of 130 µm. After preheating for 3 seconds at 100 °C, this undrawn film was drawn in a tenter in a transverse direction (the film width direction). The film was drawn by 4.75 times first at 77°C (a first stage), then was tensed by 3% at 77 °C with respect to a film width at the time of termination of the first stage for 5 seconds (heat setting), and subsequently, drawn at 75°C by 1.1 times the film width at the time of termination of the heat setting (the second stage). Subsequently, the film was cooled while applying 1% of tension to a film width after termination of drawing of the second stage. A polyester film No.12 having a thickness of 50 µm was obtained (thicknesses of both of the outer layers 12.5 µm, respectively, and a thickness of the central layer of 25 µm). Table 8 represents evaluation results of the obtained film.

Please amend the first paragraph on page 86 as shown below:

Experiments 13 to 19

Except for having changed mixing ratios of polyester chips, and kinds and amounts of addition of ultraviolet radiation cutting agents, as represented in Table 6, undrawn films having a thickness of 260 µm (thicknesses of both outer layers of 65 µm, respectively, and a thickness of central layer of 130 µm) was obtained in a same manner as in Experiment 12. Except for having changed into conditions represented in Table 7, in a same manner as in experiment 12, the undrawn films were drawn to obtain polyester films No.13 to 19 having a thickness of 50 µm (thicknesses of both outer layers of 12.5 µm, respectively, and a thickness of central layer of 25 µm). ~~"Bonasorb 3901"~~ An ultraviolet radiation cutting agent, commercially available under the

trademark BONASORB UA-3901, manufactured by Orient chemical Industries, Ltd. [[is]]was used in experiment 16 is an ultraviolet radiation cutting agent manufactured by Orient chemical Industries, Ltd., and "Novapex (registered trademark) U110" an ultraviolet radiation cutting agent commercially available under the trademark NOVAPEX U110, manufactured by Mitsubishi Chemical Corporation, was used in experiment 17 is an ultraviolet radiation cutting agent manufactured by Mitsubishi Chemical Corporation. Table 8 represents evaluation results of obtained films.

Please amend the paragraph bridging pages 95 and 96 as shown below:

Synthesis examples 16 to 23

In a same method as in synthesis example 15, polyester raw material chips I to O were obtained with a preparation composition represented in Table 9. In synthesis examples 16 and 17, polyesters I and J were obtained using antimony trioxide as a polymerization catalyst so that Sb atom might give 160 ppm with respect to a polyester. In addition, in synthesis examples 19 and 23, polyesters K and polyester O were obtained using titanium tetrabutoxide as a polymerization catalyst so that Ti atom might give 90 ppm with respect to a polyester. Furthermore, in synthesis example 21, a polyester M was obtained using cobalt acetate tetrahydrate as a polymerization catalyst so that ~~Mg~~ Co atom might give 20 ppm with respect to a polyester, and furthermore, using titanium tetrabutoxide, so that Ti atoms might give 15 ppm with respect to the polyester. In synthesis examples 20 and 22, a same polymerization catalyst as in synthesis example 15 was used. In chip K and chip O, cutting conditions of chip were changed for a same polyester. The chip O is a chip having smaller shape for comparison. In addition, DMT, DMN, EG, NPG, BD, CHDM, and PPG represent same meanings as described above.